

## ESD 14-## Including the Cost of Carbon Emissions in Major Purchasing Decisions

**Lead Department**

**Sponsor(s)**

**History**      1 year ago:                      2 years ago:

1. **Scope of the Study**
  - a. What are the key elements of the study?

It is well-recognized that the current economic system does not reflect many of the costs to the environment and human health when establishing the price of a product. A key omission from financial considerations is the damage done to the environment and human health in terms of air pollution and greenhouse gas emissions from burning fossil fuels. Due to this omission, less energy-efficient products can appear preferable to more energy-efficient products.

The City of Sunnyvale has the opportunity to establish best practice in this key area.

This study issue would establish a reasonable price for carbon emissions (in \$/ton carbon over the lifecycle of the product) to be factored in when the City purchases vehicles and major equipment. The study would develop the procedures and practices necessary to incorporate the price of carbon into these major purchasing decisions.

## ESD 14-## Code Enhancements to Encourage Recycled Water Use

**Lead Department(s) – Environmental Services and Finance**

**History**                      1 year ago                      2 years ago

1. **What are the key elements of the issue? What precipitated it?**

Numerous studies have identified that the west will experience a severe lessening of potable water/person due to climate change in the coming 100 years. This will limit growth and reduce the quality of life or at least necessitate a change in the operating basis to maintain the current quality of life.

Sunnyvale is in the process of enhancing its recycled water making capacity and production. There are several currently available markets for this product, but the capacity to produce recycled water greatly exceeds the current market for and infrastructure to provide this produce.

This study is to evaluate what change to the local building code is most appropriate to encourage the use of recycled water in the future toward the goal of using all the recycled water that the city can produce.

## ESD 14-## Sea Level Rise Building Code Enhancements Study Issue

**Lead Department(s) – Environmental Services and Finance**

**History**                      **1 year ago**                      **2 years ago**

### 2. **What are the key elements of the issue? What precipitated it?**

Buildings and their infrastructure constitute long term investments of private and public funds. These funds should be expended where they will continue to provide service for the useful life of the investment. For this purpose, the city has a policy of enhanced building requirements for those buildings that are in the flood plain.

The current measure for “flood plain” is the FEMA definition which is limited to flooding of creeks and storm drains, with no consideration of sea level rise. However sea level is rising and is predicted to rise for the next 400,000 years. There are several other entities who estimate the extent of sea level rise over the coming 100 years, the usual measure of the “useful life of buildings and public infrastructure”. For example NASA’s best estimate for sea level rise by 2030 is 6M. BCDC’s best estimate is 54” by 2050.

This study is to evaluate which measure of “flood plain” is most appropriate to adopt for enhanced building requirements and if those enhanced building requirements need to be amended.

## ESD 14-## Car Sharing Pod Study Issue

**Lead Department(s) – Environmental Services and Finance**

**History**                      **1 year ago**                      **2 years ago**

### 3. **What are the key elements of the issue? What precipitated it?**

Car sharing, both as a formal business and as peer-to peer service, is expanding in number, type and scale. Currently there are no facilities to encourage this practice. However, the expanded use of car sharing would benefit the citizens and businesses of Sunnyvale by reducing the number of individual vehicles parked in the city, so that that land could be used for active transportation or other uses.

San Francisco Municipal Transportation Agency (SFMTA) has recently adopted formal policy that will encourage more car sharing vehicles to be available on streets and to be spread throughout more locations in San Francisco. The two-year pilot will allow car sharing “pods” at 900 on-street parking spaces that can be rented by qualified car sharing organizations. Participating organizations with request specific on-street spaces and must distribute cars across three geographic zones.

This study is to evaluate what excess parking space capacity exists on city managed roadways and parking lots, what are the best locations in which to encourage car sharing (such as existing or planned transit stops or car pool start and end points) and what it would take to implement a pilot such as San Francisco’s.